

MEISHILE SE-1200-48

MEISHILE 48V 25A 1200W AC to DC Power Supply User Manual

Model: SE-1200-48

Brand: MEISHILE

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your MEISHILE 48V 25A 1200W AC to DC Power Supply, model SE-1200-48. Please read these instructions carefully before installation and operation.

Important Safety Warning: This 48V power supply does not support programming. It cannot be used with devices operating in BUCK-BOOST mode, such as batteries, chargers, speed/brightness regulators, or PWM modules.

2. PRODUCT FEATURES

- **Advanced Cooling System:** Features a cooling fan, aluminum heat sinks, silicone cooling, and a cutout design for optimal heat dissipation. This design ensures a perfect balance of weight and strength, contributing to a longer product lifespan.
- **Durable Construction:** Equipped with a 2.0mm thickened aluminum casing, resistant to wear, pressure, and impact, preventing easy deformation. The baking paint process provides excellent corrosion resistance and minimizes fingerprints.
- **High Efficiency:** Designed for low standby power consumption and high operational efficiency.
- **Stable Output:** Provides a constant DC 48V output, adjustable between 45V and 50.5V.
- **Robust Protection:** Includes overload protection with a threshold of 150%-200% of the rated current (37.5A-50A), with automatic recovery after a power cycle.
- **Dual PCB Design:** Utilizes double-sided PCBs with high-precision components, manufactured through a complex, fine, mechanized, and automated production process.
- **Environmental Resistance:** Heat and fire resistant, flame retardant, resistant to corrosion, mold, and

moisture.

- **Quality Assurance:** Each MEISHILE power supply undergoes rigorous testing for approximately 2 hours within a 6-hour period before factory release.
- **Secure Packaging:** Protected by thick pearl cotton packaging to ensure internal components are firmly fixed and prevent damage during transit.

3. SETUP AND INSTALLATION

Follow these steps for proper installation of your power supply.

3.1 Mounting

The power supply features multiple mounting holes for flexible installation. Ensure the mounting surface is stable and allows for adequate ventilation around the unit.



- ✓ Installation Is Quick And Easy
- ✓ Strong Power
- ✓ Efficient AC to DC
- ✓ CV Mode Stable Output

Skeletonized Al metal shell + Fan
for better heat dissipation and life

Figure 3.1: Example of power supply installation. The unit can be securely mounted using screws through the designated mounting points.

ADVANCED DOUBLE-SIDED BOARDS



VS

OUTDATED SINGLE-SIDED BOARDS

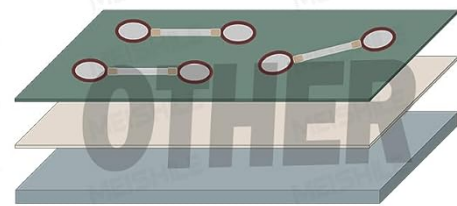
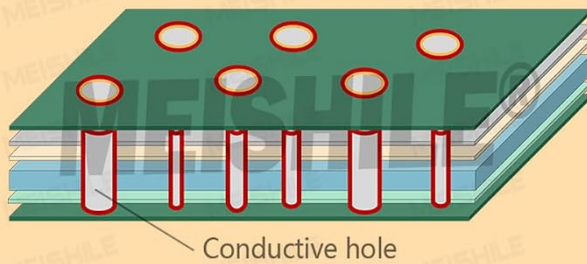
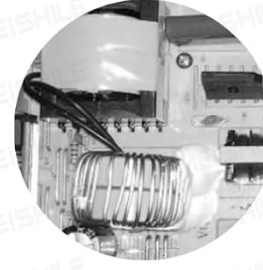


Figure 3.2: The power supply features new multi-mounting holes for versatile installation. It also highlights built-in protections against short circuit, overload (150%-200%), and overcurrent (150%-200%). The temperature-controlled fan starts at 45°C.

3.2 Input Voltage Selection

Before connecting the power supply, ensure the input voltage switch is set correctly for your region. The unit supports AC 85-145V and 185-265V. The switch is located on the side of the unit.

3.3 Wiring

Connect your AC input and DC output wires to the screw terminals. Ensure all connections are secure using a Phillips head screwdriver. The terminals are designed for easy and damage-free wire pressing.

4. OPERATING INSTRUCTIONS

Understand how to operate your power supply effectively.

4.1 Output Voltage Adjustment

The DC output voltage is adjustable from 45V to 50.5V. Use a small screwdriver to carefully turn the adjustment

potentiometer located on the unit. The output voltage difference is $\pm 1\%$.

4.2 Overload Protection

The power supply features overload protection that activates between 150% and 200% of the rated current (37.5A-50A). In case of an overload, the unit will shut down and recover automatically after the power is cycled off and on.

4.3 Cooling Fan Operation

The integrated fan is temperature-controlled and will activate when the internal temperature reaches 45°C to maintain optimal operating conditions.

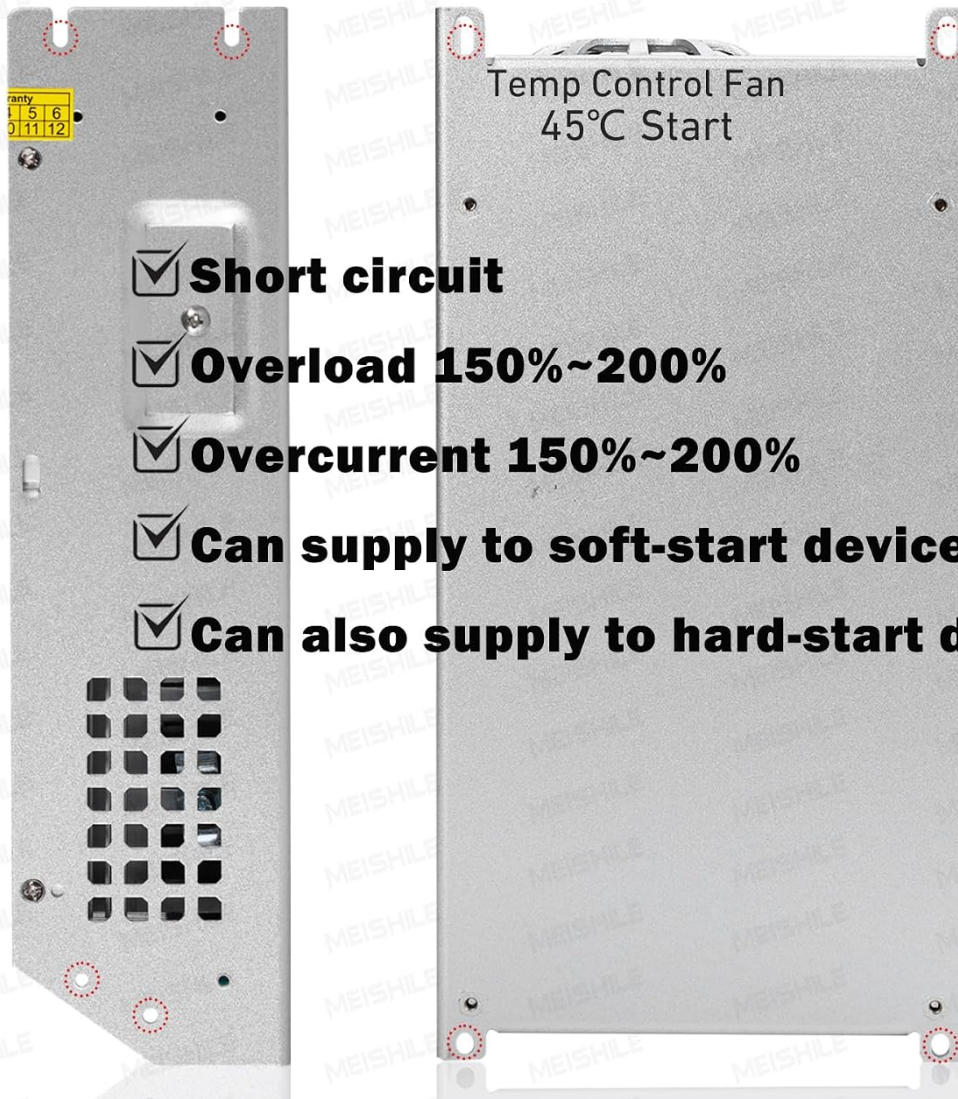
4.4 Selecting the Correct Power Supply Capacity

To ensure proper operation and prevent overload, select a power supply with a capacity greater than the maximum peak power of your connected appliance.

- **Soft-start equipment (e.g., LED lamps):** For appliances with a soft start, the power supply capacity should be 80% or less of the appliance's peak power. For example, a 150W lamp with a maximum peak of 14.7A ($150\text{W} / 80\% = 187.5\text{W}$) requires a power supply of 187.5W or more.
- **Hard-start equipment (e.g., heaters):** For appliances with a hard start, the power supply capacity should be 50% or less of the appliance's peak power. For example, a 150W heater with a maximum peak of 31.2A ($150\text{W} / 50\% = 300\text{W}$) requires a power supply of 300W or more.

New Multi Mounting Holes

INTELLIGENT CHIP MULTIPLE PROTECTION



- ✓ **Short circuit**
- ✓ **Overload 150%~200%**
- ✓ **Overcurrent 150%~200%**
- ✓ **Can supply to soft-start devices**
- ✓ **Can also supply to hard-start devices**

Figure 4.1: Overview of the power supply showing its dimensions (24.5cm x 12.5cm x 6.5cm), the input voltage selection switch (115V/230V), and a table detailing rated power consumption, AC input, DC output, recommended output load, and overload protection.

5. MAINTENANCE

To ensure the longevity and optimal performance of your power supply, follow these maintenance guidelines:

- **Keep Clean:** Regularly clean the exterior of the unit with a dry, soft cloth. Avoid using liquid cleaners that could seep into the internal components.
- **Ensure Ventilation:** Make sure the ventilation openings are clear of dust and obstructions to allow for proper airflow and cooling. The temperature-controlled fan is crucial for heat dissipation.
- **Environmental Conditions:** Operate the power supply in a dry, well-ventilated environment, away from excessive heat, humidity, and corrosive substances.

6. TROUBLESHOOTING

This section addresses common issues you might encounter.

6.1 No Output Power

- **Check Input Voltage Switch:** Ensure the AC input voltage switch (115V/230V) is correctly set for your local power supply.
- **Verify Connections:** Confirm that all AC input and DC output wires are securely connected to the terminals.
- **Power Cycle:** If the unit experienced an overload, disconnect the load, power off the unit, wait a few minutes, then power it back on.

6.2 Fan Noise

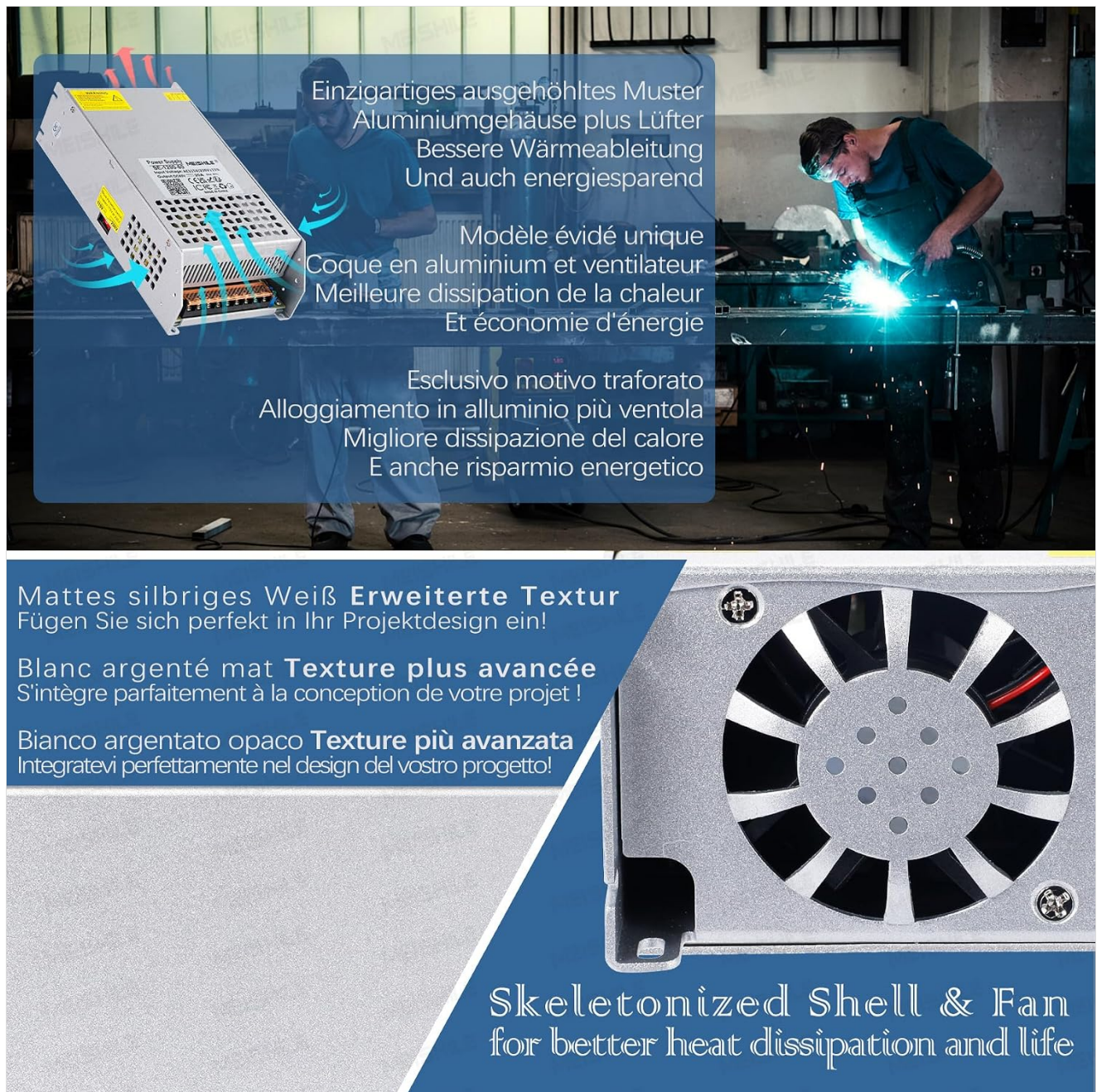
The power supply features a temperature-controlled cooling fan that activates at 45°C. It is normal for the fan to produce some audible noise during operation, especially under higher loads or in warmer environments. If the noise is excessive or unusual, ensure the fan vents are not obstructed.

7. SPECIFICATIONS

Specification	Value
Manufacturer	MEISHILE
Model Number	SE-1200-48
Product Dimensions (L x W x H)	24.5 x 12.5 x 6.5 cm
Product Weight	1.23 kg
Color	Silver
Power Source Type	Corded Electric
Input Voltage	AC 85-145V / 185-265V (Switchable)
Output Voltage	DC 48V (Adjustable 45-50.5V)
Output Wattage	1200 Watts
Output Amperage	25 Amperes
Overload Protection	150%-200% of Rated Current (37.5A-50A), Recovery after power off
Fan Start Temperature	45°C
Switch Type	Slide Switch
Mounting Type	Wall Mount
Components Included	AC to DC Power Supply, Multilingual User Manual

8. CERTIFICATIONS

The MEISHILE SE-1200-48 power supply complies with various international standards, ensuring product safety and quality.



The image is a composite of three parts. The top left shows a silver power supply unit with blue arrows indicating airflow from the front and top. The top right shows a welder in a dark workshop, with a bright blue light from the welding torch. The bottom right is a close-up of the power supply's fan, which has a silver frame and black blades.

Einzigartiges ausgehöhltes Muster
Aluminiumgehäuse plus Lüfter
Bessere Wärmeableitung
Und auch energiesparend

Modèle évidé unique
Coque en aluminium et ventilateur
Meilleure dissipation de la chaleur
Et économie d'énergie

Esclusivo motivo traforato
Alloggiamento in alluminio più ventola
Migliore dissipazione del calore
E anche risparmio energetico

Mattes silbriges Weiß **Erweiterte Textur**
Fügen Sie sich perfekt in Ihr Projektdesign ein!

Blanc argenté mat **Texture plus avancée**
S'intègre parfaitement à la conception de votre projet !

Bianco argentato opaco **Texture più avanzata**
Integratevi perfettamente nel design del vostro progetto!

Skeletonized Shell & Fan
for better heat dissipation and life

Figure 8.1: The product holds multiple certifications, including CE (EMC, LVD, ROHS) and UKCA (EMC, LVD, ROHS), demonstrating compliance with European and UK regulatory standards.

9. WARRANTY AND SUPPORT

MEISHILE is committed to providing long-term support for its products.

If you have any questions or require assistance, please contact our customer service team immediately. Our team has extensive experience in power supplies and transformers and is ready to help with both pre-sale and post-sale inquiries.

A multilingual user guide is also available in the product guides and documents section online.

For more information about MEISHILE products, visit the official [MEISHILE Brand Store](#).

